Submittals are those shop drawings, product data, samples, and mock-ups to be delivered to the design professional (the architect or engineer) for review and action as required by the contract documents.

Various types of submittals are part of the construction process. These include action submittals, informational submittals, those furnished as part of project closeout, and those that are considered maintenance material. An important element of the submittal process is the preparation, review, and approval of shop drawings. The American Institute of Architects (AIA) defines shop drawings as follows:

Shop drawings: Drawings, diagrams, schedules, and other data specifically prepared for the work by the contractor or a sub-contractor, manufacturer, supplier, or distributor to illustrate some portion of the work.

The purpose of shop drawings is to enable the design professional to secure graphic representation from the general contractor as to how the installing contractor intends to complete a portion of the work, prior to proceeding, for which submittals are required.

The submittal process begins for the design professional during the preparation of technical specifications. Identifying the types of submittals that are required within the project manual is just the beginning of the submittal process. Master guide specifications, along with manufacturer’s specifications may enumerate a list of submittals that could be furnished for each division of work. It is the responsibility of the design professional to review that list of potentially required submittals to determine those germane to the specific project. It is important to evaluate which submittals are necessary and appropriate to ensure sufficient coordination during construction.

As a project enters the construction phase, the responsibility for processing shop drawings and other submittals is often delegated to a junior associate as an administrative function. This important review process should be managed by someone familiar with the project and also knowledgeable of the type of construction for which submittals may be reviewed.

A general contractor is typically required to prepare a schedule of submittals. Similarly, the design professional should document, through their submittal log book, a list of those required submittals specified in each section within the project manual. Completing this task prior to the start of construction will enable the design professional to accurately track the status of submittals during the construction phase.

Problems may be manifested and a design professional may face liability if a project proceeds without the required shop drawings having been submitted or with shop drawings that contain errors. In both situations, the design professional’s compliance with the standard of care might be questioned. If a specific aspect of the project was incorrectly illustrated on a shop drawing or if the design deviated from specified requirements, and it has been accepted by the design professional, compliance with the standard of care may again be questioned.
If a submittal is made containing revisions in order for the specified aspect of the project to comply with the construction documents, those deviations must be identified and approved by the design professional prior to the contractor proceeding with that aspect of construction.

It is important to understand that shop drawings are not contract documents. However, the requirements with regard to requiring them and the design professional’s interaction with them, may reflect the standard of care. Section 3.12.4 of AIA Document A-201-2007 states:

Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. Their purpose is to demonstrate the way in which the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals.

Another section within the AIA General Conditions, relevant to the design professional, as part of the submittal process is Article 3.12.10. This addresses those portions of the project, not designed by the architect that will require the preparation of shop drawings by another licensed professional.

If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of the Contractor by the Contract Documents, the Owner and the Architect will specify all performance and design criteria that such services must satisfy. The Contractor shall cause such services or certifications to be provided by a properly licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings, and other submittals prepared by such professional.

Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional’s written approval when submitted to the Architect. The Owner and the Architect shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications and approvals performed or provided by such design professionals, provided the Owner and Architect have specified to the Contractor all performance and design criteria that such services must satisfy.

Pursuant to this Section 3.12.10, the Architect will review, approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Contractor shall not be responsible for the adequacy of the performance and design criteria specified in the Contract Documents.

If the architect specifies that engineered shop drawings are required, and if they are to be certified by another design professional, the architect of record has the responsibility to review and take appropriate action for the limited purpose of checking for conformance with the design concept. Failure to do so may expose the architect to additional risk.

The Architect of Record should require certification from this second design professional to establish that the work designed by this other professional complies with the design intent of his project documents. Certifications related to codes and standards, structural capabilities, etc., should also be considered.

The submittal review process provides important system of checks and balances during the construction phase of a project. The purpose is to ensure that the end result conforms to the design intent depicted in the construction documents and meets the expectations of the owner. During the pre-construction conference, it is important for the owner, architect and contractor to gain a clear understanding as to the roles and responsibilities of those tasked with implementing the submittal process. This process involves significant potential risk which must be properly managed. During the pre-construction meeting, applicable contract provisions should be read, discussed, and documented as having been reviewed.

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Through his architectural experience and professional credentials, Ron Bertone provides technical investigation and expert analysis on legal cases that include evaluating compliance with the applicable standard of care, construction defects, code compliant construction, and other building or professional service claims.

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